

ELECTRONIC MULTI-HAND STUD POKER GAMES

1 This invention relates primarily to electronic video
2 poker games, and more particularly to electronic video stud
3 poker games that are based on poker hand rankings and allow
4 the player to play multiple hands at the same time. The
5 player starts with two or more identical partial hands and
6 then each hand is completed by the displaying of additional
7 cards so that each hand is a final stud poker hand.

8

Background of the Invention

9
10 Five card, six card and seven card stud have been played
11 for many years, usually in a poker room setting in which a
12 plurality of players play against each other striving to
13 obtain the highest ranking poker hand (or lowest ranking poker
14 hand in Lo-Ball poker) in order to win the pot which comprises
15 the wagers made by the players during the play of the game.

16 Electronic video poker has also been a staple in gaming
17 casinos for many years and this well known game is a single
18 player game based on draw poker. The player attempts to
19 achieve a winning poker hand ranking by discarding from an
20 initial five card hand and drawing new cards in order to try

1 and improve his poker hand. A pay table is provided to show
 2 the player what he can win based on the poker hand ranking
 3 achieved after the draw step and the amount wagered by the
 4 player.

5 There have been attempts to adapt stud poker to an
 6 electronic video game format. One attempt involved a single
 7 player seven card stud game in which the player makes a first
 8 wager and initially received three cards face up. In one
 9 version of this game, the player has the option of making
 10 additional wagers before the player receives the fourth,
 11 fifth, sixth and seventh cards. In another version, the
 12 player also has the option of making additional wagers before
 13 receiving the fourth, fifth, sixth and seventh cards unless
 14 the player has already achieved a winning poker hand combina-
 15 tion, in which case the player is not allowed to make addi-
 16 tional wagers. In either version, the final seven cards are
 17 analyzed and the best five card hand is used to determine the
 18 poker hand ranking of the player's hand. A pay table is used
 19 based on five card poker hand rankings and the amount wagered
 20 by the player to determine the amount won by the player when
 21 he achieves a winning hand.

22

1 5,417,430 and United States Patent No. 5,544,892, the
2 disclosures of which are incorporated herein.

3 It is an object of the present invention to provide a
4 multi-hand format to stud poker games.

5 It is a feature of the present invention to deal and
6 display multiple partial hands to the player, each partial
7 hand having the same cards. Each partial hand is then
8 completed into a final stud hand by dealing and displaying
9 additional cards to each hand. The poker hand ranking of each
10 final stud hand is determined and winning final hands are paid
11 based on the poker hand ranking of the final stud hand and the
12 amount wagered by the player.

13 It is an advantage of the present invention that multiple
14 stud hands may be played by the player thereby increasing the
15 enjoyment of the game as well as increasing the number of
16 hands that can be played in a certain time period thereby
17 creating a higher revenue game for the gaming casino.

18 Other objects, features and advantages of the present
19 invention will become apparent from a consideration of the
20 following detailed description.

21

Summary of the Invention

The method of present invention involves the player making a wager to play multiple hands of a stud poker game. The player selects the number of hands that the player wishes to play. The wager is allocated among the number of hands that are to be played.

Once the player has made his wager, a plurality of initial partial hands are displayed to the player. Each initial partial hand has the same cards with the cards displayed face up to the player. The initial partial hands are randomly dealt from a single deck of playing cards. Each hand is then completed as a stud poker final hand by dealing the additional cards from either the original single deck of cards (less the initially dealt cards) or from a plurality of depleted decks of playing cards, each depleted deck of playing cards comprising a full deck less the cards dealt as the initial partial hand. The player wins or loses depending on the poker hand ranking of each final hand. The amount won by the player is based on the poker hand ranking of each final hand and the amount wagered by the player according to a pay table.

In the preferred embodiment of the present invention, each initial partial hand has four cards and the final hand

1 has five cards. In other variations of the present invention,
2 each initial partial hand can have one, two or three cards and
3 the final hand has five cards. In yet other variations of the
4 present invention, the final hand can have three, four, six,
5 seven or more cards and the initial partial hand would then
6 have less cards than the final hand.

7

8 **Brief Description of the Drawings**

9 Figure 1 shows a gaming machine configured to practice
10 the method of present invention.

11 Figure 2 shows the screen display for Version #1 of the
12 present invention after a representative result that could
13 occur during the play of the game.

14 Figure 3 shows the screen display for Version #2 of the
15 present invention and shows a representative result that could
16 occur during the play of the game.

17 Figure 4 shows the screen display for Version #3 of the
18 present invention and shows a representative result that could
19 occur during the play of the game.

20 **Detailed Description of the Preferred Embodiments**

21 The present invention includes a variety of electronic
22 video stud poker games. Each electronic video stud poker game

1 is designed to be played by having the hands to be played by
2 the player displayed on a video screen.

3 Figure 1 shows a gaming machine upon which the method of
4 the present invention can be carried out. The gaming machine
5 10 includes a video screen display 20 on which is shown the
6 playing cards that will be used during the play of the method
7 of the present invention. The video screen display 20 also
8 includes other information and data presented to the player to
9 allow the player to understand the play of the game and to
10 effect the operation of the method.

11 In the preferred embodiment of the present invention, the
12 video screen display 20 shows a credit meter 22 and a display
13 of the "bet per hand" 24 which is the number of credits
14 wagered on each hand for a particular round of play of the
15 game. The video screen display also has a DEAL/DRAW touch
16 screen location to allow the player to cause the initial deal
17 of the cards to be displayed on the video screen display 20.
18 Other touch screen locations allow the player to make his
19 initial wager, which can be made one credit at a time using
20 the BET ONE location 26 or which can be made by wagering the
21 maximum number of credits allowed by the gaming machine using
22 the BET MAX location 28.

23

16 The gaming machine 10 also includes a coin head 50 to
17 allow the player to insert coins or gaming tokens as wagers to
18 allow play of the gaming machine 10. A bill acceptor slot 52
19 is also provided on the gaming machine 10. In order to accrue
20 credits that may be used to play the gaming machine 10, the
21 player inserts paper currency or other suitable script or
22 gaming coupons into the bill acceptor slot 52 behind which, on
23 the interior of the gaming machine, is mounted a bill acceptor

1 which takes in and validates the currency. The monetary value
 2 of the inserted currency is then applied to the credit meter
 3 22, the credits on which the player may use to play the gaming
 4 machine.

5 A plurality of buttons 48 can also be provided on the
 6 button panel 40 to allow the player to select the number of
 7 hands which the player wishes to play. For example, TWO HAND
 8 button 48A allows the player to select to play two hands.
 9 THREE HAND button 48B allows the player to select to play
 10 three hands. FIVE HAND button 48C allows the player to select
 11 to play five hands. TEN HAND button 48D allows the player to
 12 select to play ten hands. FIFTY HAND button 48E allows the
 13 player to select to play fifty hands. Any suitable distribu-
 14 tion of the number of hands can be allocated to the buttons
 15 and fewer or more than five buttons 48 can be used.

16 Instead of using buttons on the button panel, the video
 17 screen display 20 can be provided with touch screen locations
 18 (not shown) that the player would touch to select the number
 19 of hands that the player wishes to play.

20 Any other conventional and suitable equipment can be
 21 included in the gaming machine.

22

Version #1 of the present invention uses a standard fifty-two card deck of playing cards. A player makes an initial wager to activate the game and the player selects the number of hands that the player wishes to play during that round of the game. The player also determines the amount of the wager that is to be allocated to each hand of cards that the player will play.

9 For example, the player may make a wager of fifteen
10 credits and select to play three hands of cards. In the
11 preferred embodiment of the present invention, the computer
12 controls of the gaming machine will allocate five credits to
13 each hand the player has selected to play. Alternatively, the
14 computer controls could prompt the player to input the amount
15 the player wishes to play on each hand.

After the wager is made and after the deck of playing cards has been electronically shuffled, a first partial hand of four cards is randomly dealt and displayed face up to the player on the screen display. These same four cards by suit and rank are also displayed in each of the other partial hands that the player has selected to play, which following the example, would be the second hand and the third hand. Thus, in this example, the player starts with three identical

1 partial hands of four cards all displayed face up.

2 Figure 1 shows on the video screen display 20 the first
3 partial hand 910, the second partial hand 920 and the third
4 partial hand 930 with the same four cards shown face up. In
5 the example shown in Figure 1, the four face up initial cards
6 are the Ace of Hearts, the King of Hearts, the Queen of Hearts
7 and the Jack of Hearts.

8 The computer controls of the gaming machine 10 then
9 proceed to the next step of the method in which the fifth card
10 in each hand is dealt and displayed to the player. In one
11 embodiment of the present invention, the fifth card for each
12 hand is dealt from the depleted deck of forty eight cards
13 (which represent the cards remaining from the original fifty-
14 two card deck less the four initially dealt cards). Thus in
15 completing each hand, the player has one chance in forty-eight
16 to be dealt the Ten of Hearts which would give the player a
17 Heart Royal Flush. In this embodiment, the depleted forty-
18 eight card deck is reshuffled electronically before the fifth
19 card is dealt to complete each hand.

20 In another embodiment of the present invention, the fifth
21 card for the first hand 910 is dealt from the depleted deck of
22 forty-eight cards (which represent the cards remaining from
23 the original fifty-two card deck less the four initially dealt

1 cards). Thus in completing the first hand 910, the player has
 2 one chance in forty-eight to be dealt the Ten of Hearts which
 3 would give the player a Heart Royal Flush.

4 The fifth card for the second hand 920 is dealt from the
 5 further depleted deck of forty-seven cards (which represent
 6 the cards remaining from the original fifty-two card deck less
 7 the four initially dealt cards and the fifth card dealt to the
 8 first hand 910). Thus in completing the second hand 920, the
 9 player has one chance in forty-seven to be dealt the Ten of
 10 Hearts (unless, of course, the Ten of Hearts was already dealt
 11 to the first hand 910).

12 The fifth card for the third hand 930 is dealt from the
 13 further depleted deck of forty-six cards (which represent the
 14 cards remaining from the original fifty-two card deck less the
 15 four initially dealt cards, the fifth card dealt to the first
 16 hand 910 and the fifth card dealt to the second hand 920).
 17 Thus in completing the third hand 930, the player has one
 18 chance in forty-six to be dealt the Ten of Hearts (unless, of
 19 course, the Ten of Hearts was already dealt to the first hand
 20 910 or the second hand 920). In this embodiment, the cards of
 21 each of the depleted decks may or may not be electronically
 22 reshuffled before displaying the fifth card to complete each
 23 hand.

1 Figure 2 shows an example of how the hands may be
2 completed by the display of the fifth card. Hand 910 could
3 result in the Ace of Hearts 911, the King of Hearts 912, the
4 Queen of Hearts 913, the Jack of Hearts 914 and the Nine of
5 Clubs 915. The poker hand ranking of this hand is Ace High
6 and would not be a winning hand combination in the preferred
7 embodiment of the present invention.

8 Hand 920 could result in the Ace of Hearts 921, the King
9 of Hearts 922, the Queen of Hearts 923, the Jack of Hearts 924
10 and the Ten of Hearts 925. The poker hand ranking of this
11 hand is a Heart Royal Flush and would be a winning hand
12 combination in the preferred embodiment of the present
13 invention.

14 Hand 930 could result in the Ace of Hearts 931, the King
15 of Hearts 932, the Queen of Hearts 933, the Jack of Hearts 934
16 and the Four of Hearts 935. The poker hand ranking of this
17 hand is a Heart Flush and would be a winning hand combination
18 in the preferred embodiment of the present invention.

19 Any suitable poker hand combinations can be designated
20 was winning and losing hand combinations. The amount won by
21 the player is determined according to a pay table based on the
22 poker hand combination achieved by the player and the amount
23 wagered by the player.

1 Typically, pay tables are determined based on the
2 mathematical probability of certain poker combinations
3 occurring during the play of the game and based on the desired
4 theoretical hold percentage to be kept by the gaming estab-
5 lishment. Any suitable pay table may be used and a represen-
6 tative pay table is shown in Table 1.

7

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Poker Hand Combination	Payout Odds
Less than Pair of 6's	Losing Hand
Pair of 6's thru 10's	1 for 1
Pair of Jacks thru Aces	1 to 1
Two Pair	2 to 1
Three of a Kind	3 to 1
Straight	10 to 1
Flush	20 to 1
Full House	30 to 1
Four of a Kind	100 to 1
Straight Flush	800 to 1
Royal Flush	5000 to 1

2

3

Table 1.

4

1 Version #2.

2 Version #2 of the present invention uses a standard
3 fifty-two card deck of playing cards. This method of play is
4 similar to that described in Version #1, but there are only
5 three face up cards in each partial hand.

6 A player makes an initial wager to activate the game and
7 the player selects the number of hands that the player wishes
8 to play during that round of the game. The player also
9 determines the amount of the wager that is to be allocated to
10 each hand of cards that the player will play.

11 For example, the player may make a wager of fifteen
12 credits and select to play three hands of cards. In the
13 preferred embodiment of the present invention, the computer
14 controls of the gaming machine will allocate five credits to
15 each hand the player has selected to play. Alternatively, the
16 computer controls could prompt the player to input the amount
17 the player wishes to play on each hand.

18 After the wager is made and after the deck of playing
19 cards has been electronically shuffled, a first partial hand
20 of three cards is randomly dealt and displayed face up to the
21 player on the screen display. These same three cards by suit
22 and rank are also displayed face up in each of the other
23 partial hands that the player has selected to play, which

1 following the example, would be the second hand and the third
2 hand. Thus, in this example, the player starts with three
3 identical partial hands of three cards all displayed face up.

4 Figure 3 shows on the video screen display 20 the first
5 partial hand 940, the second partial hand 950 and the third
6 partial hand 960 with the same three cards shown face up. In
7 the example shown in Figure 3, the three face up initial cards
8 are the Ace of Hearts 941, 951 and 961, the King of Hearts
9 942, 952 and 962 and the Queen of Hearts 943, 953 and 963.

10 The computer controls of the gaming machine 10 then
11 proceed to the next step of the method in which the fourth and
12 fifth cards in each hand are dealt and displayed to the
13 player. In one embodiment of the present invention, the
14 fourth and fifth cards for each hand are dealt from the
15 depleted deck of forty-nine cards (which represent the cards
16 remaining from the original fifty-two card deck less the three
17 initially dealt cards). In this embodiment, the depleted
18 forty-nine card deck is reshuffled electronically before the
19 fourth and fifth cards are dealt to complete each hand.

20 In another embodiment of the present invention, the
21 fourth and fifth cards for the first hand 940 are dealt from
22 the depleted deck of forty-nine cards (which represent the
23 cards remaining from the original fifty-two card deck less the

1 three initially dealt cards). The fourth and fifth cards for
2 the second hand 950 are dealt from the further depleted deck
3 of forty-seven cards (which represent the cards remaining from
4 the original fifty-two card deck less the three initially
5 dealt cards and the two cards dealt to the first hand 940).
6 Finally, the fourth and fifth cards for the third hand 960 are
7 dealt from the further depleted deck of forty-five cards
8 (which represent the cards remaining from the original fifty-
9 two card deck less the three initially dealt cards, the two
10 cards dealt to the first hand 940 and the two cards dealt to
11 the second hand 950). In this embodiment, the cards of each
12 of the depleted decks may or may not be electronically
13 reshuffled before displaying the fifth card to complete each
14 hand.

15 Figure 3 also shows an example of how the hands may be
16 completed by the display of the fourth and fifth cards. Hand
17 940 could result in the Ace of Hearts 941, the King of Hearts
18 942, the Queen of Hearts 943, the Queen of Clubs 944 and the
19 Queen of Diamonds 945. The poker hand ranking of this hand is
20 Three-of-a-Kind and would be a winning hand combination in the
21 preferred embodiment of the present invention.

22 Hand 950 could result in the Ace of Hearts 951, the King
23 of Hearts 952, the Queen of Hearts 953, the Seven of Hearts

1 Any suitable pay table may be used and a representative
2 pay table is shown in Table 2.

Poker Hand Combination	Payout Odds
Less than Pair of 6's	Losing Hand
Pair of 6's thru 10's	1 for 1
Pair of Jacks thru Aces	1 to 1
Two Pair	2 to 1
Three of a Kind	3 to 1
Straight	10 to 1
Flush	20 to 1
Full House	30 to 1
Four of a Kind	100 to 1
Straight Flush	800 to 1
Royal Flush	5000 to 1

Table 2.

1 Other variations of the present invention can use only one
 2 card or two cards initially dealt face up with the remaining
 3 cards of the five card being dealt face down.

4 Another variation can use hands having more than five
 5 cards - such as six, seven or more cards. Less than the
 6 entire hand is shown face up with the remaining cards shown
 7 face down. Winning hand combinations can be based on the best
 8 five card poker hand achieved out of the six, seven or more
 9 card hands. Alternatively, the winning hand combinations can
 10 be the best six, seven or more card poker hand achieved. When
 11 six or more card poker hands are used, then additional non-
 12 traditional poker hand rankings can be used as winning card
 13 combinations such as two Three-of-a-Kinds, or a Four-of-a-Kind
 14 and a Pair, Six (or more) Card Straight Flushes and Six (or
 15 more) Card Royal Flushes.

16 It is also possible to use four card, three card or even
 17 two card poker hands. Again, less than the entire hand is
 18 shown face up with the remaining cards face down.

19 Another variation would include designating certain cards
 20 as wild cards or adding one or more Jokers to the standard
 21 deck and using the Jokers as wild cards.

22 Yet another variation of the present invention includes
 23 providing bonus payouts to the player for achieving the same

1 ending hands. For example, if the player were playing three
 2 hands and the player received two or three Royal Flushes, or
 3 two or three Four-of-a-Kinds, or generally two or three of the
 4 same poker hand rankings, then the player could be awarded an
 5 extra payout.

6 This extra payout could be of any suitable type. The
 7 player could receive a higher fixed or progressive amount in
 8 lieu of the regular amount shown in the regular pay table.
 9 Alternatively, the player could be awarded a fixed or
 10 progressive amount bonus amount in addition to the payout that
 11 the player would be awarded from the regular pay table.

12

13 Version #3

14 In another version of the present invention, the method
 15 of play could start with a preselected partial hand, rather
 16 than having the partial hand randomly dealt and displayed to
 17 the player. At the beginning of each round of play, the
 18 player would know what the starting partial hand would be and
 19 the player would merely select how many hands the player
 20 wishes to play and the amount to be wagered on each hand.
 21 When the player had made these selections and pressed the DEAL
 22 button, the computer controls would complete each partial hand
 23 by randomly selecting the cards necessary to complete each

1 hand. The player would win or lose on each hand depending on
2 the poker ranking of each completed hand.

3 For example, as shown in Figure 4, the preselected
4 starting hand could be Four to a Straight Flush (as shown the
5 King of Clubs, the Queen of Clubs, the Jack of Clubs and the
6 Ten of Clubs). The player then decides how many hands of this
7 preselected starting hand the player wishes to play (as shown
8 the player has selected to play three hands -- first hand
9 1010, second hand 1020 and third hand 1030). The player then
10 determines how many credits to wager on each hand, say five
11 credits.

12 The player presses the DEAL button and the computer
13 controls randomly select a fifth card for each hand. In one
14 embodiment of the present invention, the fifth card for each
15 hand is dealt from the depleted deck of forty-eight cards
16 (which represent the cards remaining from the original fifty-
17 two card deck less the four preselected cards that have been
18 dealt and displayed to the player). Thus in completing each
19 hand, the player has one chance in forty-eight to be dealt the
20 Ace of Clubs which would give the player a Club Royal Flush.
21 The player also has a one in forty-eight chance to be dealt
22 the Nine of Clubs which would give the player a Club Straight
23 Flush. The player also has a seven in forty-eight chance to

1 be dealt one of the other clubs which would give the player a
 2 Club Flush (but not the Club Royal Flush or the Club Straight
 3 Flush). The player also has varying chances to achieve a
 4 Straight or a Pair, either of which would also be a winning
 5 hand. In fact, the player has only a twenty-one chance in
 6 forty-eight of not achieving a winning hand of some type.

7 In this embodiment, the depleted forty-eight card deck is
 8 reshuffled electronically before the fifth card is dealt to
 9 complete each hand.

10 In another embodiment of the present invention, the fifth
 11 card for the first hand 1010 is dealt from the depleted deck
 12 of forty-eight cards (which represent the cards remaining from
 13 the original fifty-two card deck less the four initially dealt
 14 cards). The fifth card for the second hand 1020 is dealt from
 15 the further depleted deck of forty-seven cards (which repre-
 16 sent the cards remaining from the original fifty-two card deck
 17 less the four initially dealt cards and the fifth card dealt
 18 to the first hand 1010). The fifth card for the third hand
 19 1030 is dealt from the further depleted deck of forty-six
 20 cards (which represent the cards remaining from the original
 21 fifty-two card deck less the four initially dealt cards, the
 22 fifth card dealt to the first hand 1010 and the fifth card
 23 dealt to the second hand 1020). In this embodiment, the cards

1 of each of the depleted decks may or may not be electronically
2 reshuffled before displaying the fifth card to complete each
3 hand.

4 Any suitable poker hand combinations can be designated
5 was winning and losing hand combinations. The amount won by
6 the player is determined according to a pay table based on the
7 poker hand combination achieved by the player and the amount
8 wagered by the player.

9 Typically, pay tables are determined based on the
10 mathematical probability of certain poker combinations
11 occurring during the play of the game and based on the desired
12 theoretical hold percentage to be kept by the gaming estab-
13 lishment. Any suitable pay table may be used and a represen-
14 tative pay table is shown in Table 3 when the starting is hand
15 is Four to a Straight Flush and the four cards are a King,
16 Queen, Jack and Ten of the same suit.

17

1

Poker Hand Combination	Payout Odds
Less than a straight	Losing Hand
Straight	1 for 1
Straight Flush	15 for 1
Royal Flush	26 for 1

2

3

Table 3.

Any suitable starting partial hand can be preselected as the starting hand to be offered to the player. Typical preselected starting hands can include Two or Threes-of-a-Kind, Two Pair, Four card Straights and Four card Flushes. A menu can be provided to the player of a plurality of preselected starting hands and the player can pick from the menu which preselected starting the hand the player wishes to play for that round of the game. The number of face up cards initially dealt to the player would be determined by the preselected starting hand being offered to the player.

Alternatively, the preselected starting hand can be randomly selected by the computer controls from a group of possible starting hands or the gaming machine can be

1 programmed to simply offer the player a single preselected
2 starting hand such a Four to the Royal Flush.

3 Another variation can use hands having more than five
4 cards - such as six, seven or more cards. Winning hand
5 combinations can be based on the best five card poker hand
6 achieved out of the six, seven or more card hands. Alterna-
7 tively, the winning hand combinations can be the best six,
8 seven or more card poker hand achieved. When six or more card
9 poker hands are used, then additional non-traditional poker
10 hand rankings can be used as winning card combinations such as
11 two Three-of-a-Kinds, or a Four-of-a-Kind and a Pair, Six (or
12 more) Card Straight Flushes and Six (or more) Card Royal
13 Flushes.

14 Another variation would include designating certain cards
15 as wild cards or adding one or more Jokers to the standard
16 deck and using the Jokers as wild cards. For example, the
17 preselected starting hand could be one or more wild cards.
18 The winning and losing hand combinations would be chosen based
19 on the probability of various poker hand combinations achieved
20 and the percentage game return offered to the player.

21 In all of the versions of the present invention, special
22 bonus payouts can be added if each hand completes to the same
23 ending result, such as all of the hands finishing in the same

1 Royal Flush. These bonus payout amounts could be fixed
2 amounts or progressive payout amounts.

3 While the invention has been illustrated with respect to
4 several specific embodiments thereof, these embodiments should
5 be considered as illustrative rather than limiting. Various
6 modifications and additions may be made and will be apparent
7 to those skilled in the art. Accordingly, the invention
8 should not be limited by the foregoing description, but rather
9 should be defined only by the following claims.